



1600

RAW SEQUENCE LISTING

DATE: 07/16/2003

PATENT APPLICATION: US/09/807,742A

TIME: 15:48:18

Input Set : A:\1465us00.app

Output Set: N:\CRF4\07152003\I807742A.raw

3 <110> APPLICANT: DANIELL, HENRY
 5 <120> TITLE OF INVENTION: PRODUCTION OF PHARMACEUTICAL PROTEINS IN TRANSGENIC
 6 PLASTIDS
 8 <130> FILE REFERENCE: 1465-PCT-US-00
 10 <140> CURRENT APPLICATION NUMBER: 09/807,742A
 11 <141> CURRENT FILING DATE: 2001-04-18
 13 <150> PRIOR APPLICATION NUMBER: PCT/US01/06288
 14 <151> PRIOR FILING DATE: 2001-02-28
 16 <160> NUMBER OF SEQ ID NOS: 19
 18 <170> SOFTWARE: PatentIn Ver. 2.1
 20 <210> SEQ ID NO: 1
 21 <211> LENGTH: 1250
 22 <212> TYPE: PRT
 23 <213> ORGANISM: Artificial Sequence
 25 <220> FEATURE:
 26 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
 27 peptide
 29 <220> FEATURE:
 30 <223> OTHER INFORMATION: This sequence may encompass 1-250 Gly Val Gly Val Pro
 31 repeats
 33 <400> SEQUENCE: 1
 34 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
 35 1 5 10 15
 37 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
 38 20 25 30
 40 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
 41 35 40 45
 43 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
 44 50 55 60
 46 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
 47 65 70 75 80
 49 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
 50 85 90 95
 52 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
 53 100 105 110
 55 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
 56 115 120 125
 58 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
 59 130 135 140
 61 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
 62 145 150 155 160
 64 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
 65 165 170 175

ENTERED

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67 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
68      180      185      190
70 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
71      195      200      205
73 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
74      210      215      220
76 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
77 225      230      235      240
79 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
80      245      250      255
82 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
83      260      265      270
85 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
86      275      280      285
88 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
89      290      295      300
91 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
92 305      310      315      320
94 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
95      325      330      335
97 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
98      340      345      350
100 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
101      355      360      365
103 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
104      370      375      380
106 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
107 385      390      395      400
109 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
110      405      410      415
112 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
113      420      425      430
115 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
116      435      440      445
118 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
119      450      455      460
121 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
122 465      470      475      480
124 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
125      485      490      495
127 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
128      500      505      510
130 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
131      515      520      525
133 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
134      530      535      540
136 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
137 545      550      555      560
139 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly

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140					565					570					575	
142	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val
143					580					585					590	
145	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly
146					595					600					605	
148	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val
149					610					615					620	
151	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro
152	625					630					635					640
154	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly
155					645					650					655	
157	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val
158					660					665					670	
160	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly
161					675					680					685	
163	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val
164					690					695					700	
166	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro
167	705					710					715					720
169	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly
170					725					730					735	
172	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val
173					740					745					750	
175	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly
176					755					760					765	
178	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val
179					770					775					780	
181	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro
182	785					790					795					800
184	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly
185					805					810					815	
187	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val
188					820					825					830	
190	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly
191					835					840					845	
193	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val
194					850					855					860	
196	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro
197	865					870					875					880
199	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly
200					885					890					895	
202	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val
203					900					905					910	
205	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly
206					915					920					925	
208	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val
209					930					935					940	
211	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro
212	945					950					955					960

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214 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
215          965          970          975
217 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
218          980          985          990
220 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
221          995          1000          1005
223 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
224    1010          1015          1020
226 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
227 1025          1030          1035          1040
229 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
230          1045          1050          1055
232 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
233          1060          1065          1070
235 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
236    1075          1080          1085
238 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
239    1090          1095          1100
241 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
242 1105          1110          1115          1120
244 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
245          1125          1130          1135
247 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
248    1140          1145          1150
250 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
251    1155          1160          1165
253 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
254    1170          1175          1180
256 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
257 1185          1190          1195          1200
259 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
260          1205          1210          1215
262 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
263          1220          1225          1230
265 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
266    1235          1240          1245
268 Val Pro
269    1250
272 <210> SEQ ID NO: 2
273 <211> LENGTH: 6
274 <212> TYPE: PRT
275 <213> ORGANISM: Artificial Sequence
277 <220> FEATURE:
278 <223> OTHER INFORMATION: Description of Artificial Sequence: Illustrative
279     endoplasmic reticulum retention signal
281 <400> SEQUENCE: 2
282 Ser Glu Lys Asp Glu Leu
283   1          5
286 <210> SEQ ID NO: 3

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287 <211> LENGTH: 4
288 <212> TYPE: PRT
289 <213> ORGANISM: Artificial Sequence
291 <220> FEATURE:
292 <223> OTHER INFORMATION: Description of Artificial Sequence: Illustrative
293     peptide
295 <400> SEQUENCE: 3
296 Gly Pro Gly Pro
297     1
300 <210> SEQ ID NO: 4
301 <211> LENGTH: 25
302 <212> TYPE: DNA
303 <213> ORGANISM: Artificial Sequence
305 <220> FEATURE:
306 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
308 <400> SEQUENCE: 4
309 ccgtcgacgt agagaagtcg gtatt                25
312 <210> SEQ ID NO: 5
313 <211> LENGTH: 27
314 <212> TYPE: DNA
315 <213> ORGANISM: Artificial Sequence
317 <220> FEATURE:
318 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
320 <400> SEQUENCE: 5
321 gcccattggtta aaatcttggt ttatttta            27
324 <210> SEQ ID NO: 6
325 <211> LENGTH: 28
326 <212> TYPE: DNA
327 <213> ORGANISM: Artificial Sequence
329 <220> FEATURE:
330 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
332 <400> SEQUENCE: 6
333 cctttaaaaa gccttccatt ttctattt            28
336 <210> SEQ ID NO: 7
337 <211> LENGTH: 25
338 <212> TYPE: DNA
339 <213> ORGANISM: Artificial Sequence
341 <220> FEATURE:
342 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
344 <400> SEQUENCE: 7
345 gccatggttaa aatcttggtt tatta                25
348 <210> SEQ ID NO: 8
349 <211> LENGTH: 12
350 <212> TYPE: DNA
351 <213> ORGANISM: Artificial Sequence
353 <220> FEATURE:
354 <223> OTHER INFORMATION: Description of Artificial Sequence: Illustrative
355     preferred nucleotide sequence
357 <400> SEQUENCE: 8

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VERIFICATION SUMMARY

DATE: 07/16/2003

PATENT APPLICATION: US/09/807,742A

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Input Set : A:\1465us00.app

Output Set: N:\CRF4\07152003\I807742A.raw